



SPIRO

Solutions Pvt. Ltd



- **Research & Development Program(RDP)**
- **Final Year Academic Project(FAP) in Software and Embedded Technologies**
- **Application Development Program(ADP)**

PROJECT TITLES GUIDE
2017-2018

www.spiroprojects.com



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About Spiro

Spiro Group of Companies South India's leading Research & Development Organization. Over a decade, we are furnishing individuals in all technologies and domains by fulfilling their desires in Research & Development sector through efficient training methodologies. All our efforts are focused on students to meet industry requirements.

The global presence and reach attained by Spiro is not only substantiated by its presence, but also by the environment provided for the students. Since our environment is encapsulated with doctorates, professionals and other experts. Accordingly, we created a setting which enables student to recover from the existing learning processes and making them to be an intellect.

In our increasing globalization, Spiro moves forward to unite the desires of students and challenges of the future in R & D sector by improving the agility and enabling students to achieve sustainable growth over their rivalry. For future enhancement, industry based knowledge's are provided for students in various levels. To sum up, we are filling student necessities in all possible ways to make career brighter in their desired field.

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IMAGE PROCESSING

MEDICAL IMAGE PROCEEESING

SNO	PROJECT CODE	TITLE	YEAR
1.	ITIMP01	Feature Sensitive Label Fusion with Random Walker for Atlas-based Image Segmentation	2017
2.	ITIMP02	Tumor cell load and heterogeneity estimation from diffusion-weighted MRI calibrated with histological data: an example from lung cancer	2017
3.	ITIMP03	Color Retinal Image Enhancement Based on Luminosity and Contrast Adjustment	2017
4.	ITIMP04	Segmentation of locally varying numbers of outer retinal layers by a model selection approach	2017
5.	ITIMP05	A robust active contour segmentation based on fractional-order differentiation and fuzzy energy	2017
6.	ITIMP06	Automatic Detection of Retinal Lesions for Screening of Diabetic Retinopathy	2017
7.	ITIMP07	Automatic Nuclear Segmentation Using Multi-scale Radial Line Scanning with Dynamic Programming	2017
8.	ITIMP08	Geometry Based Pectoral Muscle Segmentation from MLO Mammogram Views	2017
9.	ITIMP09	A Discriminatively Trained Fully Connected Conditional Random Field Model for Blood Vessel Segmentation in Fundus Images	2016
10.	ITIMP10	Bleeding Frame and Region Detection in the Wireless Capsule Endoscopy Video	2016

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11.	ITIMP11	Statistical Modeling of Retinal Optical Coherent Tomography	2016
12.	ITIMP12	Red Lesion Detection using Dynamic Shape Features for Diabetic Retinopathy Screening	2016
13.	ITIMP13	Brain Tumor Segmentation using Convolutional Neural Networks in MRI Images	2016
14.	ITIMP14	Optic Disc Localization in Retinal Images based on Cumulative Sum Fields	2016
IMAGE RETRIEVAL			
15.	ITIMP15	Unsupervised Word Spotting in Historical Handwritten Document Images using Document-oriented Local Features	2017
16.	ITIMP16	Landmark Image Retrieval by Jointing Feature Refinement and Multimodal Classifier Learning	2017
17.	ITIMP17	Compositional Model-Based Sketch Generator in Facial Entertainment	2017
18.	ITIMP18	Clothes Co-Parsing via Joint Image Segmentation and Labeling with Application to Clothing Retrieval	2016
MACHINE LEARNING & NEURAL NETWORKS			
19.	ITIMP19	Traffic Sign Detection and Recognition Using Fuzzy Segmentation Approach and Artificial Neural Network Classifier Respectively	2017
20.	ITIMP20	Clearing the Skies: A deep network architecture for single-image rain removal	2017
21.	ITIMP21	Semi-Supervised Image-to-Video Adaptation for Video Action Recognition	2017
22.	ITIMP22	Machine learning methods for binary and multiclass classification of melanoma thickness from dermoscopic images	2016

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IMAGE SEGMENTATION			
23.	ITIMP23	Real-Time Moving Object Segmentation and Classification from HEVC Compressed Surveillance Video	2017
24.	ITIMP24	Salient Region Detection via Discriminative Dictionary Learning and Joint Bayesian Inference	2017
25.	ITIMP25	An Incremental Framework for Video-Based Traffic Sign Detection, Tracking, and Recognition	2017
26.	ITIMP26	RWBD: Learning Robust Weighted Binary Descriptor for Image Matching	2017
27.	ITIMP27	A Multi-objective Decision Making Approach for Solving the Image Segmentation Fusion Problem	2017
28.	ITIMP28	Comprehensive and Practical Vision System for Self-driving Vehicle Lane-Level Localization	2016
29.	ITIMP29	Patch-Based Video Denoising With Optical Flow Estimation	2016
30.	ITIMP30	CASAIR: Content and Shape-Aware Image Retargeting and Its Applications	2016
STEGANOGRAPHY			
31.	ITIMP31	A Robust and Secure Video Steganography Method in DWT-DCT Domains Based on Multiple Object Tracking and ECC	2017
32.	ITIMP32	Watermarking of Digital Media with Encrypted Biometric Features for Digital Ownership	2017
33.	ITIMP33	On the Security of a Class of Diffusion Mechanisms for Image Encryption	2017
34.	ITIMP34	An image encryption algorithm based on auto-	2016

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		blocking and ECG signal	
35.	ITIMP35	Remote Authentication via Biometrics: A Robust Video-Object Steganographic Mechanism Over Wireless Networks	2016
36.	ITIMP36	High Capacity Reversible Data Hiding in Encrypted Images by Patch-Level Sparse Representation	2016
BIOMETRICS			
37.	ITIMP37	An Efficient Signature Verification Method based on an Interval Symbolic Representation and a Fuzzy Similarity Measure	2017
38.	ITIMP38	Facial Expression Recognition in Video with Multiple Feature Fusion	2017
39.	ITIMP39	Robust Iris Segmentation Method Based on a New Active Contour Force With a Noncircular Normalization	2017
40.	ITIMP40	Robust Point Set Matching for Partial Face Recognition	2016
41.	ITIMP41	Fingerprint Liveness Detection From Single Image Using Low Level Features and Shape Analysis	2016
AUDIO PROCESSING			
42.	ITIMP42	Audio-based Granularity-adapted Emotion Classification	2017
43.	ITIMP43	Sampling and Exact Reconstruction of Pulses with Variable Width	2017
44.	ITIMP44	Anti-Spoofing for Text-Independent Speaker Verification: An Initial Database, Comparison of Countermeasures, and Human Performance	2016
45.	ITIMP45	Speech Emotion Recognition Using Fourier Parameters	2015
ARDUINO WITH MATLAB			

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46.	ITIMP46	Sensor-Based Assistive Devices for Visually-Impaired People: Current Status, Challenges, and Future Directions	2017
47.	ITIMP47	Mobile Robot Positioning by using Low-Cost Visual Tracking System	2017
48.	ITIMP48	Accident Avoidance by Using Road Sign Recognition System	2017
49.	ITIMP49	Real Time Fire and Smoke Detection using Multi-Expert System for Video-Surveillance Applications	2017
50.	ITIMP50	A Monitoring Device for Blind	2017
51.	ITIMP51	Automated Control System for Arduino and Android Based Intelligent Greenhouse	2017
52.	ITIMP52	Vision based Bottle classification and Automatic Bottle Filling System	2017
53.	ITIMP53	Arduino Based Supervision of Banana Ripening Stages	2017
54.	ITIMP54	Biometric Access for a Secure Smart Robot	2017
55.	ITIMP55	Remote Image Sensing Platform Based on Arduino	2017
RASPBERRY PI WITH MATLAB			
52.	ITIMP56	Text-to-Speech Device for Patients with Low Vision	2017
53.	ITIMP57	Raspberry Pi Image Processing Based Economical Automated Toll System	2017
54.	ITIMP58	Road Sign Recognition System on Raspberry Pi	2017
55.	ITIMP59	Real-time Fire Detection for Video Surveillance Applications using a Combination of Experts based on Color, Shape and Motion	2017

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56.	ITIMP60	Smart Drip Irrigation System using Raspberry pi and Arduino	2017
57.	ITIMP61	An Efficient Attendance Management System based on Face Recognition using Matlab and Raspberry Pi 2	2017
58.	ITIMP62	Raspberry pi based face recognition system for door unlocking	2017
59.	ITIMP63	Smart Motion Detection System using Raspberry Pi	2017
60.	ITIMP64	Pedestrian Counting System Using Raspberry-Pi	2017
61.	ITIMP65	Smart monitoring of worker posture in an office environment	2017

MATLAB COMMUNICATION

ORTHOGONAL FREQUENCY-DIVISION MULTIPLEXING(OFDM)

62.	ITCM01	New PTS Schemes For PAPR Reduction Of OFDM Signals Without Side Information	2017
63.	ITCM02	Design Space-Time Trellis Coded Inter-Carrier Interference Parallel Cancellation Architectures for OFDM Systems	2017
64.	ITCM03	Full Duplex Delay Diversity Relay Transmission Using Bit-Interleaved Coded OFDM	2017
65.	ITCM04	Pilot Optimization For Estimation Of High-Mobility OFDM Channels	2017
66.	ITCM05	Electromagnetic Emission-aware Scheduling for the Uplink of Multi-cell OFDM Wireless Systems	2017
67.	ITCM06	OFDM receiver for fast time-varying channels using block-sparse	2016

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		Bayesianlearning	
68.	ITCM07	Beam forming OFDM Performance under Joint PhaseNoiseand I/QImbalance	2016
69.	ITCM08	Low-Complexity Modem Design forGFDM	2016
COGNITIVE RADIONETWORK(CRN)			
70.	ITCM09	Optimal Eigenvalue Weighting Detection forMulti-AntennaCognitive RadioNetworks	2017
71.	ITCM10	On Secure Underlay MIMO Cognitive Radio Networkswith Energy Harvesting and Transmit AntennaSelection	2017
72.	ITCM11	Secure Communication in OFDMA Based CognitiveRadio Networks: An Incentivized Secondary NetworkCoexistence Approach	2017
73.	ITCM12	Design of Cooperative Non-Orthogonal MulticastCognitive Multiple Access for 5G Systems: User Schedulingand PerformanceAnalysis	2017
74.	ITCM13	Spectrum Sensor Employing Continuous Pilot Tonesin Cognitive RadioSystems	2017
75.	ITCM14	Antenna Selection For Dual-Hop Cognitive RadioNetworks:A Multiple-RelayScenario	2017
76.	ITCM15	Interference Efficiency: A New Metric to AnalyzethePerformance of Cognitive RadioNetworks	2017
77.	ITCM16	Sniffer Channel Assignment with Imperfect Monitoringfor Cognitive RadioNetworks	2016
78.	ITCM17	Low Complexity Energy Detection for Spectrum Sensing with Random Arrivals of PrimaryUsers	2016
79.	ITCM18	Outage Performance of Cognitive Relay Networkswith Wireless Information and PowerTransfer	2016

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MUTIPLE INPUT MUTIPLEOUTPUT(MIMO)			
80.	ITCM19	Precoding for MIMO Channels in Cognitive Radio Networks With CSI Uncertainties and for Compound Capacity	2017
81.	ITCM20	A Scalable Framework for CSI Feedback in FDD Massive MIMO via DL Path Aligning	2017
82.	ITCM21	Scalable Source Transmission with Unequal Frequency Reuse in MIMO Cellular Networks	2017
83.	ITCM22	Dynamic User Grouping and Joint Resource Allocation with Multi-Cell Cooperation for Uplink Virtual MIMO Systems	2017
84.	ITCM23	New Beamforming Designs for Joint Spatial Division and Multiplexing in Large-Scale MISO Multi-user Systems	2017
85.	ITCM24	BER Analysis for Spatial Modulation in Multicast MIMO Systems	2016
86.	ITCM25	Performance Analysis of Dual-Hop MIMO AF Relaying Network with Multiple Interferences	2016
87.	ITCM26	Performance Evaluation of Best Path Selection in a Multi-Hop Decode-and-Forward Cooperative System	2016
88.	ITCM27	New Results on Transceiver Design for Two-hop Amplify-and-forward MIMO Relay Systems with Direct Link	2016
OPTICAL COMMUNICATION			
89.	ITCM28	Optical MIMO-OFDM with Generalized LED Index Modulation	2017
90.	ITCM29	PAPR Reduction for Hybrid ACO-OFDM Aided IM/DD Optical Wireless Vehicular Communications	2017

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91.	ITCM30	Performance of Wireless Optical Communication in S-Distributed Turbulence	2016
RELAY-COMMUNICATION			
92.	ITCM31	Energy Efficiency Maximization Precoding Design for SWIPT in MIMO Two-Way Relay Networks	2017
93.	ITCM32	Joint Transceiver Design for Secure Downlink Communications over an Amplify-and-Forward MIMO Relay	2017
94.	ITCM33	A Near BER-Optimal Decoding Algorithm for Convolutional Coded Relay Channels with the Decode-and-Forward Protocol	2017
SATELLITE COMMUNICATION			
95.	ITCM34	A Novel Beamforming and Combining Scheme for Two-Way AFSatellite Systems	2016
96.	ITCM35	Channel Estimation and Detection in Satellite Communication Systems	2016
POWER ELECTRONICS			
RENEWABLE ENERGY			
I.SOLAR ENERGY			
97.	ITPW01	Photovoltaic Module Integrated Standalone Single Stage Switched Capacitor Inverter with Maximum Power Point Tracking	2017
98.	ITPW02	High-Performance Quasi-Z-Source Series Resonant DC-DC Converter for Photovoltaic Module Level Power Electronics Applications	2017
99.	ITPW03	MPPT in Dynamic Condition of Partially Shaded PV System by using WODE	2017

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		Technique	
100.	ITPW04	Analysis of Modulation Strategy for the Minimization of Leakage Current in the PV Grid Connected Cascaded Multi-Level Inverter	2017
101.	ITPW05	Non-linear PWM Controlled Single-phase Boost Mode Grid-Connected Photovoltaic Inverter with Limited Storage Inductance Current	2017
102.	ITPW06	4-Switch Single-Stage Single-Phase Buck-Boost Inverter	2017
103.	ITPW07	A High-Efficiency Hybrid Resonant Converter with Wide-Input Regulation for Photovoltaic Applications	2017
104.	ITPW08	A Family of Neutral-Point-Clamped Circuits of Single-phase PV Inverters: Generalized Principle and Implementation	2017
105.	ITPW09	A Three Phase Hybrid Cascaded Modular Multilevel Inverter For Renewable Energy Environment	2016
106.	ITPW10	High-Gain Single-Stage Boosting Inverter For Photovoltaic Applications	2016
107.	ITPW11	Soft Switching Non Isolated Current Fed Inverter For PV/Fuel Cell Application	2016

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108.	ITPW12	Design And Analysis Of A High Efficiency DC-DC Converter With Soft Switching Capability For Renewable Energy Application Requiring High Voltage Gain	2016
II.WINDENERGY			
109.	ITPW13	Fault Ride Through and Grid Support Topology for the VSC-HVDC Connected Offshore Wind Farms	2017
110.	ITPW14	A Resonant ZVZCS DC-DC Converter with Two Uneven Transformers for MVDC Collection System of Offshore Wind Farms	2017
111.	ITPW15	A Step-up Transformer-less, ZV-ZCS High-Gain DC/DC Converter with Output Voltage Regulation Using Modular Step-up Resonant Cells for DC Grid in Wind Systems	2017
112.	ITPW16	Control & Operation Of A Dc Grid Based Wind Power Generation System In A Micro grid	2016
III.HYBRID SYSTEMS			
113.	ITPW17	Multi-Objective Control Algorithm for Small Hydro and SPV Generation Based Dual Mode Reconfigurable System	2017
114.	ITPW18	DC Grid Voltage Regulation Using New HESS Control Strategy	2017
115.	ITPW19	A Supervisory Power Management System for a Hybrid Micro grid with HESS	2017

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116.	ITPW20	Grid Connected PV-Wind –Battery Based Multi Input Transformer Coupled Bi Directional DC-DC Converter For Household Application	2016
117.	ITPW21	A Modified Reference Of An Intermediate Bus Capacitor Voltage Based Second Harmonic Current Reduction Method For A Standalone Photovoltaic Power System	2016
IV.ENERGY STORAGE SYSTEM			
118.	ITPW22	Fixed-Frequency PWM-Controlled Bidirectional Current-Fed Soft-Switching Series-Resonant Converter for Energy Storage Applications	2017
119.	ITPW23	Robust Nonlinear Controller Design for On-grid/Off-grid Wind Energy Battery-Storage System	2017
120.	ITPW24	A Primary Full-Integrated Active Filter Auxiliary Power Module in Electrified Vehicles with Single-Phase Onboard Chargers	2017
121.	ITPW25	High Step Up /Step Down Soft Switching Bidirectional DC-DC converter with coupled inductor and voltage matching control for energy storage systems	2016
AC TO DC CONVERSIONS			
122.	ITPW26	Improved Power Quality Bridgeless Converter Based SMPS for Arc Welding	2017

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123.	ITPW27	An Electrolytic capacitor less High Power factor LED Driver Based on a “one- and- a-half stage” forward- flyback topology	2017
124.	ITPW28	An Output-Current-Dependent DC-link Energy Regulation Scheme for A Family of Soft-switched AC/DC Offline LED Drivers without Electrolytic Capacitors	2017
125.	ITPW29	Flexible Mode Bridgeless Boost PFC Rectifier with High Efficiency over a Wide Range of Input Voltage	2017
126.	ITPW30	A Family of Single-Phase Voltage- Doubler High-Power-Factor SEPIC Rectifiers Operating in DCM	2017
127.	ITPW31	Power Factor Corrected Welding Power Supply Using Modified Zeta Converter	2016
128.	ITPW32	Power Quality Improved Bridgeless Converter Based Computer Power Supply	2016
129.	ITPW33	Soft Switching Two Switch Resonant AC-DC Converter With High Power Factor	2016
130.	ITPW34	A Novel Multilevel Multi Output Bidirectional Active Buck PFC Rectifier	2016
131.	ITPW35	Interleaved SEPIC Power Factor Pre Regulator Using Coupled Inductors In Discontinuous Conduction Mode With Wide Output Voltage	2016
DC TO AC CONVERSIONS			
132.	ITPW36	Current- Sensorless Power-Decoupling Phase-Shift Dual-Half-Bridge Converter for DC-AC Power Conversion Systems without	2017

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		Electrolytic Capacitor	
133.	ITPW37	A Highly Reliable and High Efficiency Quasi Single-Stage Buck-Boost Inverter	2017
134.	ITPW38	One-Cycle Control for Electrolytic Capacitor-Less Second Harmonic Current Compensator	2017
135.	ITPW39	Modulation Technique for Single-Phase Transformerless Photovoltaic Inverters with Reactive Power Capability	2017
136.	ITPW40	Efficient Transformerless MOSFET Inverter Grid Tied Photovoltaic System	2016
137.	ITPW41	A Novel Zero-Voltage-Switching Push-Pull High-Frequency-Link (PPHFL) Single-Phase Inverter	2016
138.	ITPW42	Bi Directional Single Power Conversion DC-AC Converter With Non Complementary Active Clamp Circuits	2016
139.	ITPW43	A Coupled Inductor Based High Boost Inverter With Sub Unity Turns-Ratio Rating	2016
MULTILEVEL INVERTER			
140.	ITPW44	Novel Cascaded Switched-diode Multilevel Inverter for Renewable Energy Integration	2017
141.	ITPW45	Quasi Cascaded H-Bridge Five-Level Boost Inverter	2017
142.	ITPW46	A New Reduced-Component Hybrid Flying Capacitor Multi cell Converter	2017

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143.	ITPW47	A Novel Nine-Level Inverter Employing One Voltage Source and Reduced Components as High Frequency AC Power Source	2017
144.	ITPW48	A Self balanced Step-up Multilevel Inverter based on switched capacitor structure	2017
145.	ITPW49	A New Cascaded Switched-Capacitor Multilevel Inverter Based On Improved Series-Parallel Conversion With Less Number Of Components	2016
146.	ITPW50	Design And Implementation Of A Novel Multilevel DC-AC Inverter	2016
DC TO DC CONVERSIONS			
147.	ITPW51	Design and Analysis of a High Voltage-Gain Step-up Resonant DC-DC Converter for Transportation Applications	2017
148.	ITPW52	A High Efficiency Asymmetrical Half-Bridge Converter With Integrated Boost Converter in Secondary Rectifier	2017
149.	ITPW53	Cascaded Dual-Buck Inverter With Reduced Number of Inductors	2017
150.	ITPW54	A New ZVT Snubber Cell for PWM-PFC Boost Converter	2017
151.	ITPW55	A Control Method for the Sheppard–Taylor PFC Rectifier to Reduce Capacitance Requirements	2017
152.	ITPW56	Extended Switched-Boost DC-DC Converters Adopting Switched-Capacitor/Switched-Inductor Cells for High Step-up Conversion	2016

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153.	ITPW57	A New Transformerless Buck Boost Converter With Positive Output Voltage	2016
154.	ITPW58	Z-Source Resonant Converter With Power Factor Correction For Wireless Power Transfer Applications	2016
155.	ITPW59	Highly efficient asymmetrical Pwm full converter for renewable energy sources	2016
AC TO AC CONVERSIONS			
156.	ITPW60	ZVS Phase Shift PWM-Controlled Single-Stage Boost Full Bridge AC-AC Converter for High Frequency Induction Heating Applications	2017
157.	ITPW61	A New Class of Single-Phase High-Frequency Isolated Z-Source AC-AC Converters with Reduced Passive Components	2017
158.	ITPW62	Unified Non-Inverting and Inverting PWM AC-AC Converter with Versatile Modes of Operation	2017
159.	ITPW63	A Single Stage High Frequency Resonant Ac/Ac Converter	2016
160.	ITPW64	High Efficiency Single Phase Ac –Ac Converters Without Commutation Problem	2016
AC & DC DRIVES APPLICATIONS			
166.	ITPW65	A Novel Method of Reducing Commutation Torque Ripple for Brushless DC Motor Based	2017

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		on Cuk Converter	
167.	ITPW66	Quasi-Z-Source Indirect Matrix Converter Fed Induction Motor Drive for Flow Control of Dye in Paper Mill	2017
168.	ITPW67	Inverter Power Control Based on DC-link Voltage Regulation for IPMSM Drives without Electrolytic Capacitors	2017
169.	ITPW68	Single Stage Solar PV Fed Brushless DC Motor Driven Water Pump	2017
170.	ITPW69	Single Phase Grid Connected Motor Drive System Dc Link Shunt Compensator & Small Dc Link Capacitor	2016
171.	ITPW70	Sensorless Control For High Speed Brushless Dc Motor Based On Line To Line Back Emf	2016
172.	ITPW71	Bldc motor driven solar pv array –fed water pumping system employing zeta converter	2016
ELECTRICAL VEHICLE APPLICATION			
173.	ITPW72	A Novel Step-up Multi-Input DC-DC Converter for Hybrid Electric Vehicles Application	2017
174.	ITPW73	An Electrolytic Capacitor-less Bi-directional EV Charger for V2G and V2H Applications	2017
175.	ITPW74	Inductive Power Transfer for Massive Electric Bicycles Charging Based on Hybrid Topology Switching with A Single Inverter	2017

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176.	ITPW75	Topology & Control Scheme Of OBC-LDC Integrated Power Unit For Electrical Vehicles	2016
177.	ITPW76	Pulse Width Modulation Based Electromagnetic Interference Mitigation Of Bi Directional Grid Connected For Electrical Vehicles	2016
FUZZY CONTROL TECHNIQUES			
178.	ITPW77	A Performance Investigation of a Four-Switch Three-Phase Inverter-Fed IM Drives at Low Speeds Using Fuzzy Logic and PI Controllers	2017
179.	ITPW78	Artificial Neural Network for Control and Grid Integration of Residential Solar Photovoltaic Systems	2017
180.	ITPW79	Design and Hardware Implementation of FLMPPT Control of PV Systems Based on GA and Small-Signal Analysis	2017
181.	ITPW80	Sensorless Fuzzy-Logic-Based Maximum Power Point Tracking Control For A Small-Scale Wind Power Generation Systems With A Switched Mode Rectifier	2016
182.	ITPW81	Experimental Evaluation Of A Partially Shaded Photovoltaic System With A Fuzzy Logic-Based Peak Power Tracking Control Strategy	2016
183.	ITPW77	A Performance Investigation of a Four-Switch Three-Phase Inverter-Fed IM Drives at Low Speeds Using Fuzzy Logic and PI Controllers	2017

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MICROGRID APPLICATION			
184.	ITPW82	Inverse Power factor Droop control for Decentralized power sharing in series connected micro converters based islanding Micro grids	2017
185.	ITPW83	Peak Energy Management using Renewable Integrated DC Microgrid	2017
186.	ITPW84	Naturally Clamped Snubberless Soft Switching Bidirectional Current Fed Three Phase Push Pull Dc- Dc Converter For Dc Microgrid Application	2016
187.	ITPW85	Non Isolated Bidirectional Soft Switching Current Fed LCL Resonant Dc/Dc Converter To Interface Energy Storage In Dc Microgrid	2016
POWER SYSTEMS			
188.	ITPS01	Replacing the Grid Interface Transformer in Wind Energy Conversion System With Solid-State Transformer	2017
189.	ITPS02	Transient Control of Reactive Current for Line-side Converter of Brushless Doubly Fed Induction Generator in Stand-alone Operation	2017
190.	ITPS03	Power quality enhancement for a grid connected wind turbine energy system	2017
191.	ITPS04	Advanced Voltage Support and Active Power Flow Control in Grid-Connected Converters under Unbalanced Conditions	2017

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192	ITPS05	An Improved Transformer Winding Tap Injection DSTATCOM Topology for Medium-Voltage Reactive Power Compensation	2017
193.	ITPS06	A Unified Control and Power Management Scheme for PV-Battery-Based Hybrid Micro grids for Both Grid-Connected and Islanded Modes	2017
194.	ITPS07	Single-Stage Three-Phase Grid-Tied PV System with Universal Filtering Capability Applied to DG Systems and AC Micro grids	2017
195.	ITPS08	SSR Mitigation with a New Control of PV Solar Farm as STATCOM (PV-STATCOM)	2017
196.	ITPS09	Small Signal Dynamics of DFIG-based Wind Turbines during Riding Through Symmetrical Faults in Weak AC Grid	2017
197.	ITPS10	Power Quality Improvement by using Shunt Hybrid Active Power Filter	2017
198.	ITPS11	A Single-Phase Buck Matrix Converter with High-Frequency Transformer Isolation and Reduced Switch Count	2017
199.	ITPS12	A Matrix Converter Based Bidirectional Contactless Grid Interface	2016
200.	ITPS13	Improving Performance Of Cascaded H Bridge Based Interline Dynamic Voltage Restorer	2016
201.	ITPS14	Low Power Energy Conversion With Two Phase Permanent Magnet Machine And	2016

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		Rectifier With Reduced Number Of Controlled Switches	
202.	ITPS15	Efficient Single Phase Transformer less Inverter Grid Tied PVG System With Reactive Power Control	2016
VLSI			
ANALOG AMS(TANNEREDA)			
203.	ITVL01	20-Mb/s GFSK Modulator Based on 3.6-GHz Hybrid PLL With 3-b DCO Nonlinearity Calibration and Independent Delay Mismatch Control	2017
204.	ITVL02	Delay Analysis for Current Mode Threshold Logic Gate Designs	2017
205.	ITVL03	CMCS: Current-Mode Clock Synthesis	2017
206.	ITVL04	A Closed-Form Expression for Minimum Operating Voltage of CMOS D Flip-Flop	2017
207.	ITVL05	Performance Analysis of a Low-Power High-Speed Hybrid 1-bit Full Adder Circuit	2017
208.	ITVL06	A 0.1–2-GHz Quadrature Correction Loop for Digital Multiphase Clock Generation Circuits in 130-nm CMOS	2017
209.	ITVL07	12T Memory Cell for Aerospace Applications in Nanoscale CMOS Technology	2017
210.	ITVL08	Low-Power Variation-Tolerant Non-volatile Lookup Table Design	2016
211.	ITVL09	Designing Tunable Sub-threshold Logic Circuits Using Adaptive Feedback Equalization	2016

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212.	ITVL10	High-Speed, Low-Power, And Highly Reliable Frequency Multiplier For DLL-Based clock Generator	2016
XILINX SYSTEM GENERATOR			
213.	ITVL11	Hardware Implementation Of Polyphase-composition-Based Wavelet Filters For Power System Harmonics Estimation	2017
214.	ITVL12	Area/Energy-Efficient Gamma tone Filters based On Stochastic Computation	2017
215.	ITVL13	FPGA-Based Electrocardiography (ECG) Signal Analysis System using Least-Square Linear Phase Finite Impulse Response (FIR) Filter	2016
216.	ITVL14	A Low-Power Broad-Bandwidth Noise Cancellation VLSI Circuit Design For In-Ear Headphones	2016
217.	ITVL15	Efficient Advance Encryption Standard (AES) Implementation On FPGA Using Xilinx System Generator	2016
DIGITAL SIGNAL PROCESSING			
218.	ITVL16	DSP48E Efficient Floating Point Multiplier Architectures On FPGA	2017
219.	ITVL17	Low Complexity And Critical Path Based VLSI Architecture For LMS Adaptive Filter Using Distributed Arithmetic	2017
220.	ITVL18	Operating Frequency Improvement On FPGA Implementation Of A Pipeline Large-FFT Processor	2017
221.	ITVL19	A 4096-Point Radix-4 Memory-Based FFT Using DSP Slices	2017

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222.	ITVL20	Multipliers-Driven PerturbationOf Coefficients For Low-Power OperationIn Reconfigurable FirFilters	2017
227.	ITVL21	Algorithm And Architecture DesignOf Adaptive Filters With ErrorNonlinearities	2017
228.	ITVL22	Low-Power Split-Radix FFTProcessorsUsing Radix-2 ButterflyUnits	2016
229.	ITVL23	A High-Performance Fir FilterArchitecture For Fixed And ReconfigurableApplications	2016
230.	ITVL24	Approximate Radix-8 Booth MultipliersFor Low-Power AndHigh-Performance Operation	2016
231.	ITVL25	A New Paradigm Of Common Sub-expression Elimination By Unification Of Addition And Subtraction	2016
DIGITAL DESIGN			
232.	ITVL26	Optimal• Design Of Reversible Parity Preserving New Full Adder / Full Subtractor	2017
233.	ITVL27	Floor planning Automation for Partial-Reconfigurable FPGAs via Feasible Placements Generation	2017
234.	ITVL28	Design Of Power And Area Efficient Approximate Multipliers	2017
235.	ITVL29	Digit-Level Serial-In Parallel-Out Multiplier Using Redundant Representation For A Class Of Finite Fields	2017
236.	ITVL30	ROBA Multiplier: A Rounding-Based Approximate Multiplier For High-Speed Yet Energy-Efficient Digital Signal Processing	2017
237.	ITVL31	Improved 64-Bit Radix-16 Booth Multiplier Based On Partial Product Array Height	2017

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		Reduction	
238.	ITVL32	Dual-Quality 4:2 Compressors For Utilizing In Dynamic Accuracy Configurable Multipliers	2017
239.	ITVL33	RAP-CLA: A Reconfigurable Approximate Carry Look-Ahead Adder	2017
240.	ITVL34	Design and Analysis of Multiplier Using Approximate 15-4 Compressor	2017
241.	ITVL35	High-Speed And Energy-Efficient Carry Skip Adder Operating Under A Wide Range Of Supply Voltage Levels	2016
242.	ITVL36	A New Fast And Area-Efficient Adder-Based Sign Detector For Rns $\{2n - 1, 2n, 2n + 1\}$	2016
243.	ITVL37	A Fused Floating-Point Four-Term Dot Product Unit	2016
244.	ITVL38	Ultralow-Energy Variation-Aware Design: Adder Architecture Study	2016
245.	ITVL39	Design-Efficient Approximate Multiplication Circuits Through Partial Product Perforation	2016
246.	ITVL40	Application-Specific Low-Power Multipliers	2016
FPGA DESIGN			
247.	ITVL41	Design Of Efficient Multiplier Less Modified Cosine-Based Comb Decimation Filters: Analysis And Implementation	2017
248.	ITVL42	Generating AMS Behavioral Models with Formal Guarantees on Feature Accuracy	2017
249.	ITVL43	Compact Implementations of FPGA-Based PUFs with Enhanced Performance	2017
250.	ITVL44	High Performance Parallel Decimal Multipliers Using Hybrid BCD Codes	2017
251.	ITVL45	HUB-Floating-Point for improving FPGA implementations of DSP Applications	2017

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252.	ITVL46	A Residue-to-Binary Converter for the Extended Four-Moduli Set $\{2n - 1, 2n + 1, 22n + 1, 22n+p\}$	2017
253.	ITVL47	Leveraging Unused Resources for Energy Optimization of FPGA Interconnect	2017
254.	ITVL48	Flexible DSP Accelerator Architecture Exploiting Carry-Save Arithmetic	2017
255.	ITVL49	Hybrid LUT/Multiplexer FPGA Logic Architectures	2016
256.	ITVL50	FPGA-Based Architecture For A Multisensory Barrier To Enhance Railway Safety	2016
257.	ITVL51	Ultralow-Energy Variation-Aware Design: Adder Architecture Study	2016
258.	ITVL52	Implementation Of AES Using Reversible Cellular Automata Based S-Box	2016
STATIC TIME ANALYSIS			
257.	ITVL53	A Mismatch-Insensitive Skew Compensation Architecture For Clock Synchronization In 3-D ICS	2017
258.	ITVL54	RSFQ/ERSFQ Cell Library With Improved Circuit Optimization, Timing Verification, And Test Characterization	2017
VLSI WITH MATLAB			
259.	ITVL55	High Performance Integer DCT Architectures For HEVC	2017
260.	ITVL56	A Scalable Approximate DCT Architectures For Efficient HEVC Compliant Video Coding	2017
261.	ITVL57	LUT Optimization For Distributed Arithmetic-Based Block Least Mean Square Adaptive Filter	2017
262.	ITVL58	Multiplier less Unity-Gain SDF-FFTS	2017

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263.	ITVL59	On Efficient Retiming Of Fixed-Point Circuits	2017
264.	ITVL60	Logic Testing with Test-per-Clock Pattern Loading and Improved Diagnostic Abilities	2017
265.	ITVL61	Input-Based Dynamic Reconfiguration Of Approximate Arithmetic Units for Video Encoding	2016
266.	ITVL62	Floating-Point Butterfly Architecture Based On Binary Signed-Digit Representation	2016
267.	ITVL63	A Generalized Algorithm and Reconfigurable Architecture for Efficient and Scalable Orthogonal Approximation of DCT	2016
268.	ITVL64	$(4 + 2\log n)\Delta G$ Parallel Prefix Modulo- $(2n - 3)$ Adder via Double Representation of Residues in $[0, 2]$	2016
QCA TECHNOLOGY			
269.	ITVL65	Design of Efficient BCD Adders in Quantum Dot Cellular Automata	2017
270.	ITVL66	Use: A Universal, Scalable, And Efficient clocking Scheme For QCA	2017
271.	ITVL67	Design Of Adder And Subtract or Circuits In majority Logic-Based Field-Coupled QCA nano computing	2017
DESIGN FOR TESTABILITY			
272.	ITVL68	Design for Testability Support for Launch and Capture Power Reduction in Launch-Off-Shift and Launch-Off-Capture Testing	2017
272.	ITVL69	Low-Power Programmable PRPG With Test Compression Capabilities	2016
273.	ITVL70	Design for Testability Support for Launch and Capture Power Reduction in Launch-Off-Shift and Launch-Off-Capture Testing	2016

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NS2

WIRELESS SENSOR NETWORK

274.	ITNSN01	A Secure Optimum Distributed Detection Scheme in Under-Attack Wireless Sensor Networks	2017
275.	ITNSN02	A Disaster Management-Oriented Path Planning for Mobile Anchor Node-Based Localization in Wireless Sensor Networks	2017
276.	ITNSN03	DoS Attack Energy Management Against Remote State Estimation	2017
277.	ITNSN04	An Efficient Intrusion Detection Approach for Visual Sensor Networks Based on Traffic Pattern Learning	2017
278.	ITNSN05	A Self-Adaptive Sleep/Wake-Up Scheduling Approach for Wireless Sensor Networks	2017
279.	ITNSN06	Performance Evaluation of An Adaptive Channel Allocation Technique for Cognitive Wireless Sensor Networks	2016
280.	ITNSN07	Replication Attack Detection with Monitor Nodes in Clustered Wireless Sensor Networks	2016

WIRED NETWORK

281.	ITNWN01	Empirical Analysis and Validation of Security Alerts Filtering Techniques	2017
282.	ITNWN02	Covert Attacks in Cyber-Physical Control Systems	2017
283.	ITNWN03	An Intrusion Detection System for Cyber Attacks in Wireless Networked Control Systems	2017
284.	ITNWN04	Optimal Privacy-Preserving Probabilistic Routing for Wireless Networks	2017
285.	ITNWN05	Efficient cache placement strategy in two-tier	2016

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		wireless content delivery network	
286.	ITNWN07	A multi-channel medium access control protocol For vehicular power line communication systems	2016
MANET			
287.	ITNMN01	Delay Aware Load Balancing Over Multipath Wireless Networks	2017
288.	ITNMN02	Collaborative Authentication in Decentralized Dense Mobile Networks with Key Pre distribution	2017
289.	ITNMN03	Social Norm Incentives for Network Coding in MANETs	2017
290.	ITNMN04	Fine-Grained Analysis of Packet Loss in MANETs	2017
300.	ITNMN05	Efficient wireless multimedia multicast in multi-rate multi-channel mesh networks	2016
301.	ITNMN06	A novel approach for efficient usage of intrusion detection system in mobile ad hoc networks	2016
VANET			
302.	ITNVN01	Reliable Cooperative Authentication for Vehicular Networks	2017
303.	ITNVN02	Self-Sorting Based MAC Protocol for High-Density Vehicular Ad Hoc Networks	2017
305.	ITNVN03	Improving Safety on Highways by Customizing Vehicular Ad Hoc	2017

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		Networks	
306.	ITNVN04	A Stable Clustering Algorithm based on Affinity Propagation for VANETs	2017
307.	ITNVN05	A stochastic geometry approach to the modeling of dsrc for vehicular safety communication	2016
308.	ITNVN06	Flow allocation for maximum throughput and bounded delay on multiple disjoint paths for random access wireless multi hop networks	2016
COGNITIVE RADIO NETWORK			
309.	ITNCN01	Multicast in Multihop CRNs Under Uncertain Spectrum Availability: A Network Coding Approach	2017
310.	ITNCN02	MAQ: A Multiple Model Predictive Congestion Control Scheme for Cognitive Radio Networks	2017
311.	ITNCN03	Spectrum-Aware Anypath Routing in Multi-Hop Cognitive Radio Networks	2017
312.	ITNCN04	Cooperative Spectrum Sensing with Random Access Reporting Channels in Cognitive Radio Networks	2017
313.	ITNCN05	Delay-constrained caching in cognitive radio networks	2016
314.	ITNCN06	Mobility prediction based joint stable routing and channel assignment for mobile ad hoc cognitive networks	2016
EMBEDDED			
ARDUINO			

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315.	ITAUR01	Mine Detecting Robot Prototyping	2017
316.	ITAUR02	The Development of a Multi-legged Robot Using Eight-bar Linkages as Leg Mechanisms with Switchable Modes for Walking and Stair Climbing	2017
317.	ITAUR03	Internet of Vehicles (10 V) for Traffic Management	2017
318.	ITAUR04	Real Time Health Monitoring of Industrial Machine Using Multiclass Support Vector Machine	2017
319.	ITAUR05	RFID Technology: Beyond Cash-Based Methods in Vending Machine	2017
320.	ITAUR06	Smart Home Automation System Using Bluetooth Technology	2017
321.	ITAUR07	Child Safety Wearable Device	2017
322.	ITAUR08	Performance Enhancement and IoT Based Monitoring for Smart Home	2017
323.	ITAUR09	Direct and Indirect Sensing two-axis Solar Tracking System	2017
324.	ITAUR10	A Design of a Remote Weather Factors Monitoring System	2017
325.	ITAUR11	A Real-Time Flood Alert System for Parking Lots	2017
326.	ITAUR12	Jol-Shinchen: Design and Development of a Sensor Based Intelligent Auto Irrigation System	2017
327.	ITAUR13	Intelligent Home Automation System using BitVoicer	2017
328.	ITAUR14	An Approach to Establishment of Cars to Road Management System	2017
329.	ITAUR15	Design of Bus Tracking and Fuel Monitoring System	2017
330.	ITAUR16	A Performance Oriented Novel Design of Hexapod Robots	2017
331.	ITAUR17	Automatic toll e-ticketing system for transportation systems	2016
332.	ITAUR18	Smart Lighting: Developing a Smarter Control	2016

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		Mechanism for Park Trail Lighting	
333.	ITAUR19	Smart Real-Time Healthcare Monitoring and Tracking System using GSM/GPS Technologies	2016
334.	ITAUR20	Embedded System Design of a Real-time Parking Guidance System	2016
335.	ITAUR21	Any Climb: A New Wall-Climbing Robotic Platform for Various Curvatures	2016
336.	ITAUR22	A Novel Approach for Communication among Blind, Deaf and Dumb People	2016
RASPBERRY PI			
337.	ITRAP01	IOT based vehicle parking manager	2017
338.	ITRAP02	Multiple Motion Control System of Robotic Car Based on IoT to Produce Cloud Service	2017
339.	ITRAP03	Vehicle Seat Vacancy Identification using Image Processing Technique	2017
340.	ITRAP04	An application of movement direction control for the three wheeled mobile robots using visual information	2017
341.	ITRAP05	Driving Event Detection and Driving Style Classification using Artificial Neural Networks	2017
342.	ITRAP06	Performance Enhancement and IoT Based Monitoring for Smart Home	2017
343.	ITRAP07	Improving Smart Home Security; Integrating Logical Sensing into Smart Home	2017
344.	ITRAP08	An IoT based Fire Alarming and Authentication System for Workhouse using Raspberry Pi 3	2017
345.	ITRAP09	Vehicle Detection on a Pint-Sized Computer	2017
346.	ITRAP10	Road Sign Recognition System on Raspberry Pi	2016
347.	ITRAP11	A Computationally Low Cost Vision Based Tracking Algorithm for Human Following	2016

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		Robot	
348.	ITRAP12	Open-Source Smart Home Modules	2016
349.	ITRAP13	Traffic Sensing Through Accelerometers	2016
350.	ITRAP14	An Intelligent System for Monitoring and Controlling of Street Light using GSM Technology	2016
351.	ITRAP15	Healthcare based on IoT using Raspberry Pi	2016
INTERNET OF THINGS			
352.	ITIOT01	Room Temperature Control and Fire Alarm/Suppression IoT Service Using MQTT on AWS	2017
353.	ITIOT02	Analysis of Three IoT-Based Wireless Sensors for Environmental Monitoring	2017
354.	ITIOT03	Agricultural Crop Monitoring using IOT- A Study	2017
355.	ITIOT04	Health Care Monitoring System in Internet of Things (IoT) by Using RFID	2017
356.	ITIOT05	Wake-up Stroke Prediction through IoT and its Possibilities	2017
357.	ITIOT06	Real-Time Signal Quality-Aware ECG Telemetry System for IoT-Based Health Care Monitoring	2017
358.	ITIOT07	Renewable Micro-grid State Estimation using the Internet of Things Communication Network	2017
359.	ITIOT08	Towards Safer Roads through Cooperative Hazard Awareness and Avoidance in Connected Vehicles	2017
360.	ITIOT09	Design and Implementation of Real Time Transformer Health Monitoring System Using GSM Technology	2017
361.	ITIOT10	Cloud of Things in Smart Agriculture:	2017

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		Intelligent Irrigation Monitoring by Thermal Imaging	
362.	ITIOT11	The comparison of soil sensors for integrated creation of IOT based Wetting front detector (WFD) with an efficient irrigation system to support precision farming	2017
363.	ITIOT12	Multiple Motion Control System of Robotic Car Based on IoT to Produce Cloud Service	2017
364.	ITIOT13	Secure IoT Platform for Industrial Control Systems	2017
365.	ITIOT14	Design and Implementation of Interoperable IoT Healthcare System Based on International Standards	2016
366.	ITIOT15	Interoperability of IoT Wireless Technologies in Ambient Assisted Living Environments	2016
367.	ITIOT16	Improving the Security of Wireless Sensor Networks in an IoT Environmental Monitoring System	2016
368.	ITIOT17	Intuitive IoT-based H2U Healthcare System for Elderly People	2016
369.	ITIOT18	Point-n-Press: An Intelligent Universal Remote Control System for Home Appliances	2016
370.	ITIOT19	Smart Parking System for Internet of Things	2016
371.	ITIOT20	Water Level Meter for Alerting Population about Floods	2016
LIFI-LIGHT FIDELITY			
372.	ITLI01	Current Challenges for Visible Light Communications Usage in Vehicle Applications: A Survey	2017
373.	ITLI02	Optical Wireless Data Transmission with	2017

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		Enhanced Substitution Caesar Cipher Wheel Encryption	
374.	ITLI03	Lookup: Robust and Accurate Indoor Localization Using Visible Light Communication	2017
375.	ITLI04	A Superimposed Relaying Strategy and Power Allocation for Outdoor Visible Light Communications	2017
376.	ITLI05	Cooperative Visible Light Communications with Full-Duplex Relaying	2017
377.	ITLI06	Eco-friendly data transmission in visible light communication	2016
378.	ITLI07	Smart Home Technologies using Visible Light Communication	2016
379.	ITLI08	Impact of VLC on Light Emission Quality of White LED	2016
380.	ITLI09	Stereo Audio Streaming via Visible Light	2016
381.	ITLI10	Uncoordinated Multiple Access Scheme for VLC Systems with Positioning Capability	2016
ROBOTICS			
382.	ITROB01	A Zigbee-Based Framework for Approximating Sensor Range and Bearing	2017
383.	ITROB02	Design of smart modular variable stiffness actuators for robotic assistive devices	2017
384.	ITROB03	A Soft-Robotic Gripper with Enhanced Object Adaptation and Grasping Reliability	2017
385.	ITROB04	Managing Robot Kinematics Based on Arduino Controllers Using a Unity System	2017
386.	ITROB05	A Novel 6-Axis Force/Torque Sensor for Robotic Applications	2017
387.	ITROB06	A design of Gesture controlled mobile robot	2017

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		with robotic arm for nuclear environment	
388.	ITROB07	Low-Cost, Real-Time Obstacle Avoidance for Mobile Robots	2017
389.	ITROB08	Lyapunov Based Driverless Vehicle in Obstacle Free Environment	2017
390.	ITROB09	Wireless power transfer for electric vehicle using an adaptive robot	2017
391.	ITROB10	Combined Mobile Robots Motion Control Using Information as Voice and Gesture Commands from Audio and Thermal Visual Sensors	2017
392.	ITROB11	Design and Implementation of a Lightweight Tele presence Robot For Medical Assistance	2017
393.	ITROB12	Based on MEMS Sensors Man-Machine Interface for Mechatronic Objects Control	2017
394.	ITROB13	Selective Motion Control of a Crawling Magnetic Robot System for Wireless Self-Expandable Stent Delivery in Narrowed Tubular Environments	2017
395.	ITROB14	Embedded and Real Time System Design: A Case Study Fire Fighting Robot	2017
396.	ITROB15	Analysis of Modular Biped Wall climbing Robot with High Mobility and Effective Transit Mechanism	2017
397.	ITROB16	Approach Towards Achieving Interoperability between Military Land Vehicle and Robotic Systems	2017
398.	ITROB17	Mine Detecting Robot Prototyping	2016
399.	ITROB18	A Lightweight Robotic Arm with Pneumatic Muscles for Robot Learning	2016

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401.	ITROB19	Mobile Robot for Retail Inventory Using RFID	2016
402.	ITROB20	A Dataset for Improved RGBD-based Object Detection and Pose Estimation for Warehouse Pick-and-Place	2016
403.	ITROB21	A Compact and Compliant External Pipe-Crawling Robot	2016
404.	ITROB22	Fall Detection and Prevention Control Using Walking-Aid Cane Robot	2016
405.	ITROB23	Auto Calibrated Head Orientation Controller for Robotic-Wheelchair Using MEMS Sensors and Embedded Technologies	2016
406.	ITROB24	Line Detecting and Tracking of a Mobile Robot with Multiple RGB-D Cameras	2016
407.	ITROB25	Design and Manufacture of Bio-mimic Robotic Fish	2016
RTOS-REAL TIME OPERATING SYSTEM			
408.	ITRTOS01	A Real Time Street Lighting Control System	2017
409.	ITRTOS02	Road Sense: Smartphone Application to Estimate Road Conditions using Accelerometer and Gyroscope	2017
410.	ITRTOS03	A Real-Time Flood Alert System for Parking Lots	2017
411.	ITRTOS04	A localization and an identification system of personnel in areas at risk using a wireless sensor network	2017
412.	ITRTOS05	RTOS Based Vehicle Tracking System	2017
413.	ITRTOS06	Attendance generating system using RFID and GSM	2016
414.	ITRTOS07	Flexible Non-Constrained RF Wrist Pulse Detection Sensor Based on Array Resonators	2016
415.	ITRTOS08	Modelling and Experimental Investigation of	2016

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		theMaximum Stresses Due to Bending in a Tubular-Shaped Artificial Skin Sensor	
416.	ITRTOS09	An IoT-based Scheme for Real Time Indoor Personal Exposure Assessment	2016
417	ITRTOS10	Real-Time Charging Station Recommendation System for Electric-Vehicle Taxis	2016
RSSI-RECEIVED SIGNAL STRENGTH INDICATION			
418.	ITRSSI01	Indoor Localization Using Wi-Fi Method Based on Fingerprinting Technique	2017
419.	ITRSSI02	Adaptive Locally Linear Embedding for Node Localization in Sensor Networks	2017
420.	ITRSSI03	Passive Acoustic Methods of Small Boat Detection, Tracking, and Classification	2017
421.	ITRSSI04	Using Wireless Link Dynamics to Extract a Secret Key in Vehicular Scenarios	2017
422.	ITRSSI05	Child Safety Wearable Device	2017
423.	ITRSSI06	Sensing Activities and Locations of Senior Citizens toward Automatic Day-care Report Generation	2017
424.	ITRSSI07	RSSI based Bluetooth Smart Indoor Positioning	2016
425.	ITRSSI08	A Robust Multi-cue Blending-based Approach forFloor Detection	2016
426.	ITRSSI09	A Robot Localization System Combining RSSI and Phase Shift in UHF-RFID Signals	2016
427.	ITRSSI10	RSSI-Based Maximum Likelihood Localization of Passive RFID Tags Using a Mobile Cart	2016

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WIRELESS			
428.	ITWI01	Reliable Wireless Communication and Positioning enabling Mobile Control and Safety Applications in Industrial Environments	2017
429.	ITWI02	Interleaved DC/DC Charger for Wireless Power Transfer	2017
430.	ITWI03	Study of the positioning of wireless sensors for communication at 2.4 GHz inside the train	2017
431.	ITWI04	Design and Simulation of 2*1 and 4*1 Array Antenna for Detection System of Objects or Living Things in motion	2017
432.	ITWI05	Real-Time Traffic State Estimation With Connected Vehicles	2017
433.	ITWI06	Self-Powered Zigbee Wireless Sensor Nodes for Railway Condition Monitoring	2017
434.	ITWI07	A Design of a Remote Weather Factors Monitoring System	2017
435.	ITWI08	A Wireless Sensor System for Real-Time Monitoring and Fault Detection of Motor Arrays	2017
436.	ITWI09	Design of Greenhouse Environment Monitoring System Based on Wireless Sensor Network	2017
467.	ITWI10	EMACS: Design and implementation of indoor environment monitoring and control system	2017
438.	ITWI11	Wireless Stethoscope for Recording Heart and Lung Sound	2016
439.	ITWI12	The Design of Building Fire Monitoring System Based on ZigBee-WiFi Networks	2016

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440.	ITWI13	A Blind Zone Alert System Based on Intra-Vehicular Wireless Sensor Networks	2016
441.	ITWI14	Wireless Power Transmission for Multiple Devices	2016
442.	ITWI15	A mobile Zigbee module in a traffic control system	2016
WIRELESS POWER TRANSFER			
443.	ITWT01	Impedance Matching in Magnetic-Coupling-Resonance Wireless Power Transfer for Small Implantable Devices	2017
444.	ITWT02	Acoustic Wireless Power Transfer with Receiver Array for Enhanced Performance	2017
445.	ITWT03	On the Use of Eddy Currents to Facilitate Wireless Power Transfer Through Metallic Surfaces	2017
446.	ITWT04	Standards and Methods of Power Control for Variable Power Bidirectional Wireless Power Transfer	2017
447.	ITWT05	Design Considerations For An Active Rectifier Circuit for Bidirectional Wireless Power Transfer	2017
448.	ITWT06	The wireless power transfer systems using the Class E push-pull inverter for industrial robots	2017
449.	ITWT07	Low-cost Wake-up Receiver for RF Energy Harvesting Wireless Sensor Networks	2017
450.	ITWT08	wireless power transmission for a traveling mobility scooter	2016
451.	ITWT09	Analysis and Design of Capacitive Power Transmission System Employing Out-of-band	2016

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		Wireless Feedback Link	
452.	ITWT10	Wireless Power Transmission for Multiple Devices	2016
AUTOMATION			
453.	ITAM01	Real Time Health Monitoring of Industrial Machine Using Multiclass Support Vector Machine	2017
454.	ITAM02	Bi-Directional Passing People Counting System based on IR-UWB Radar Sensors	2017
455.	ITAM03	Design of an IOT based autonomous vehicle with the aid of computer vision	2017
456.	ITAM04	Home Automation and Personalization Through Individual Location Determination	2017
457.	ITAM05	Novel Tire Inflating System using Extreme Learning Machine Algorithm for Efficient Tire Identification	2017
458.	ITAM06	Wind Measurement Based on MEMS Micro-Anemometer With High Accuracy Using ANN Technique	2017
459.	ITAM07	Earliest Sensor Detection Opportunity for Left Turn Across Path Opposite Direction Crashes	2017
460.	ITAM08	Anomaly Behaviour Analysis for Building Automation Systems	2016
461.	ITAM09	A Model for Smart Agriculture Using IoT	2016
462.	ITAM10	Robotic System for Automation of Water Quality Monitoring and Feeding in Aquaculture Shade house	2016
463.	ITAM11	MAGIC: Model-Based Actuation for Ground Irrigation Control	2016

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464.	ITAM12	Mixed Time-triggered and Event-triggered Controller For Industrial IoT Applications	2016
465.	ITAM13	Robust Multi rate On-Road Vehicle Localization for Autonomous Highway Driving Vehicles	2016
466.	ITAM14	Analysis of influence on driver behaviour while using in-vehicle traffic lights with application of head-up display	2016
467.	ITAM15	A Fuzzy-Based Building Automation Control System	2016
MECHANISM			
468.	ITEM01	Three Way Conveyers for Cool Drinks Industry	2017
469.	ITEM02	The Amphibious vehicle for sea and seashore monitoring	2017
470.	ITEM03	Automatic Control of Voice Gear Mechanism	2017
471.	ITEM04	Automatic glass cleaning robot Servant for Software Company	2017
472.	ITEM05	Automatic Car Parking In Shopping Mall	2017
473.	ITEM06	Automatic Multi level Car Parking System	2017
474.	ITEM07	Coconut Climbing Robot	2017
475.	ITEM08	Automatic Shoe polishing Machine	2017
476.	ITEM09	Hand-Motion Crane Control Using Radio Frequency real-Time Location Systems	2017
477.	ITEM10	Automatic Oil dissipation system	2017
478.	ITEM11	Hover Craft in Army	2017
479.	ITEM12	Zigbee Vehicle in Army	2017
480.	ITEM13	Automatic Multilevel Car Parking System	2017
481.	ITEM14	Automatic Wall Painting Robot	2017

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482.	ITEM15	Diffraction-Compensating Coded Aperture for Inspection in Manufacturing (PIPE CRAWLING)	2017
483.	ITEM16	Row Guidance Agriculture Robot	2017
484.	ITEM17	Vehicle Side Stand Alert System	2017
485.	ITEM18	Machine vision technique for find out defect in orange	2017
486.	ITEM19	Control of a Snake Robot for Ascending and Descending Steps	2017
487.	ITEM20	Power Generation for Street Light Using Speed Breaker	2017
488.	ITEM21	Vehicle Traffic Control by a Traffic Robot	2017
489.	ITEM22	Two Way Conveyor Machine	2017
490.	ITEM23	Intelligent Umbrella For Future Hotels	2017
491.	ITEM24	Online High-Precision Probabilistic Localization of Robotic Fish Using Visual and Inertial Cues	2017
492.	ITEM25	Automatic Welding Mechanism System	2017
493.	ITEM26	Energy Exchange between Electric Vehicle Load and Wind Generating Utilities	2017
494.	ITEM27	Advanced Power Window Motor using Permanent Magnet DC Motor	2017
495.	ITEM28	Wall Climbing Robot for Rescue	2017
496.	ITEM29	Automated Anesthesia Analyzing System Based On Microcontroller	2017
497.	ITEM30	Heat exchanger mechanism	2017
GSM&GPS			
498.	ITGP01	Electrical Appliances Control Prototype by Using GSM Module and Arduino	2017
499.	ITGP02	Design of Bus Tracking and Fuel Monitoring System	2017
500.	ITGP03	Microcontroller based Digital Meter with Alert	2017

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		System using GSM	
501.	ITGP04	E-health Acquisition, Transmission & Monitoring System	2017
502.	ITGP05	Wearable Fall Detection System	2017
503.	ITGP06	Anti-theft Protection of Vehicle by GSM & GPS with Fingerprint Verification	2017
504.	ITGP07	The Development of a Remotely Controlled Home Automation System for Energy Saving	2017
505.	ITGP08	Design and Implementation of Remotely Located Energy Meter Monitoring with Load Control and Mobile Billing System through GSM	2017
506.	ITGP09	Design and Implementation of Real Time Transformer Health Monitoring System Using GSM Technology	2017
507.	ITGP10	Visual Impairment Aid Using Haptic And Sound Feedback	2017
508.	ITGP11	Automatic Oil Tank Truck Alarm System from Illegal Fuel Hoarding with Microcontroller and GSM Module Based System	2016
509.	ITGP12	Real-time and Predictive Analytics for Smart Public Transportation Decision Support System	2016
510.	ITGP13	Smart vehicle security system for defending against collaborative attacks by malware	2016
511.	ITGP14	Smartphone-based Human Fall Detection System	2016
512.	ITGP15	SenSpeed: Sensing Driving Conditions to Estimate Vehicle Speed in Urban Environments	2016

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CONSUMER ELECTRONIC			
513.	ITCE01	Design of a Portable Smart Connected Solar Powered Charger for Consumer Electronics	2017
514.	ITCE02	Detection and Tracking of Overtaking Vehicle in Blind Spot Area at Night Time	2017
515.	ITCE03	IoT Smart Bell Notification System:Design and Implementation	2017
516.	ITCE04	A Speed Compensation Algorithm for a Head TiltsController Used for Wheelchairs and Rehabilitation Applications	2017
517.	ITCE05	Fingerprints in the Air: Unique Identification of Wireless Devices using RF RSS Fingerprints	2017
518.	ITCE06	A Wireless Sensor Network Based Low Cost andEnergy Efficient Frame Work for PrecisionAgriculture	2017
519.	ITCE07	Anti-theft Protection of Vehicle by GSM & GPS with Fingerprint Verification	2017
520.	ITCE08	Advance Automatic Toll Collection & Vehicle Detection During Collision using RFID	2017
521.	ITCE09	Real-Time Obstacles Detection and Status Classification for Collision Warning in a Vehicle Active Safety System	2017
522.	ITCE10	Secure House: A Home Security System Based onSmartphone Sensors	2017
523.	ITCE11	Abnormal Moving Vehicle Detection for Driver Assistance System in Night time Driving	2016
524.	ITCE12	A mobile robot which can follow and lead human by detecting user and behavior wearable devices	2016

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525.	ITCE13	Blind User Wearable Audio As Assistance for Indoor Navigation Based on Visual Markers and Ultrasonic Obstacle Detection	2016
526.	ITCE14	An Efficient Energy Monitoring Method Based on Bluetooth Low Energy	2016
527.	ITCE15	Performance and Interoperability Evaluation of Radiofrequency Home Automation Protocols and Bluetooth Low Energy for Smart Grid and Smart Home Applications	2016
ELECTRICAL			
528.	ITEEE01	An Intelligent Load Management System with Renewable Energy Integration for Smart Homes	2017
529.	ITEEE02	Development of Embedded System for Making Plugs Smart	2017
530.	ITEEE03	A Smart Meter Design and Implementation Using Zigbee Based Wireless Sensor Network in Smart Grid	2017
531.	ITEEE04	Power Line Fault Detection and Localization using High Frequency Impedance Measurement	2017
532.	ITEEE05	Smartphone Application to Evaluate the individual possibilities for the Application of Electric vehicles	2017
533.	ITEEE06	Power Line Carrier Communication Based LowCost Power Monitoring and Management System	2017
534.	ITEEE07	A Wireless Sensor System for Real-Time Monitoring and Fault Detection of Motor Arrays	2017
535.	ITEEE08	Massive Internet of Things for Industrial Applications	2017

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536.	ITEEEE09	Efficient Solar Power Management System for Self-Powered IoT Node	2017
537.	ITEEEE10	An Innovative Two-Level Model for Electric Vehicle Parking Lots in Distribution Systems with Renewable Energy	2017
538.	ITEEEE11	Adaptive Dynamic Programming-Based Optimal Control Scheme for Energy Storage Systems With Solar Renewable Energy	2017
539.	ITEEEE12	Impact of Power Electronic Sources on Transmission Line Ground Fault Protection	2017
540.	ITEEEE13	An Overview of Demand Response Applications under Smart Grid Concept	2017
541.	ITEEEE14	Emerging Power Quality Challenges Due to Integration of Renewable Energy Sources	2017
542.	ITEEEE15	A Smart Meter Design and Implementation Using Zigbee Based Wireless Sensor Network in Smart Grid	2017
543.	ITEEEE16	Performance Comparison of Mirror Reflected Solar Panel with Tracking and Cooling	2016
544.	ITEEEE17	Peak-Aware Online Economic Dispatching for Micro grids	2016
545.	ITEEEE18	Energy storage system and demand response program effects on stochastic energy procurement of large consumers considering renewable generation	2016
546.	ITEEEE29	Design and Implementation of Low-Cost SMS Based Monitoring System of Distribution Transformers	2016
547.	ITEEEE20	Power quality monitoring using GSM technology	2016
BIOMEDICAL			

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548.	ITBIO01	A Low Cost Automated Fluid Control Device using Smart Phone for Medical Application	2017
549.	ITBIO02	An IoT Based Remote HRV Monitoring System for Hypertensive Patients	2017
550.	ITBIO03	Implementation of Energy Efficient/Lightweight Encryption Algorithm for Wireless Body Area Networks	2017
551.	ITBIO04	Wearable Flexible Sensors: A Review	2017
552.	ITBIO05	Body and Fall Detection System with Heart Rate Monitoring	2017
553.	ITBIO06	Federated Internet of Things and Cloud Computing Pervasive Patient Health Monitoring System	2017
554.	ITBIO07	Wearable Device for Increasing the Slow Wave Sleep Stage by Electro cutaneous Stimulation	2017
555.	ITBIO08	A wireless continuous patient monitoring system for dengue: Wi-mon	2017
556.	ITBIO09	A Speed Compensation Algorithm for a Head Tilts Controller Used for Wheelchairs and rehabilitation Applications	2017
557.	ITBIO10	Elder Tracking and Fall Detection System using Smart Tiles	2017
558.	ITBIO11	Auto Dietary: A Wearable Acoustic Sensor System for Food Intake Recognition in Daily Life	2016
559.	ITBIO12	BSN-Care: A Secure IoT-based Modern Healthcare System Using Body Sensor Network	2016
560.	ITBIO13	Sensing Method of Patient's Body Movement Without Attaching Sensors on the Patient's	2016

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		Body	
561.	ITBIO14	Estimation of Circadian Body Temperature Rhythm based on Heart Rate in Healthy, Ambulatory Subjects	2016
562.	ITBIO15	An Energy Efficient Sensor for Thyroid Monitoring through the IoT	2016
EMBEDDED WITH ANDROID			
563.	ANEB01	A modular approach for smart home system architectures based on Android applications	2017
564.	ANEB02	I-Am: Implicitly Authenticate Me Person Authentication on Mobile Devices Through Ear Shape and Arm Gesture	2017
565.	ANEB03	Mine Detecting Robot Prototyping	2017
566.	ANEB04	IOT Based Smart Garbage alert system using Arduino UNO	2017
567.	ANEB05	Real-time Face Detection and Tracking on Mobile Phones for Criminal Detection	2017
568.	ANEB06	Blind Aid Stick: Hurdle Recognition, Simulated Perception, Android Integrated Voice Based Cooperation via GPS Along With Panic Alert System.	2017
569.	ANEB07	An Android-Based Mechanism for Energy Efficient Localization Depending on Indoor/Outdoor Context	2017
570.	ANEB08	Motion Analysis in Vocalized Surprise Expressions and Motion Generation in Android Robots	2017
571.	ANEB09	Flow Anomaly Based Intrusion Detection System for Android Mobile Devices	2017
572.	ANEB10	On Ad Library Updates in Android Apps	2017
573.	ANEB11	Ubiquitous Tracking Using Motion and	2016

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		LocationSensor With Application to Smartphone	
574.	ANEB12	Campus Sense - A Smart Vehicle Parking Monitoring and Management System using ANPRCameras and Android Phones	2016
575.	ANEB13	An RFID based Smartphone Proximity AbsenceAlert System	2016
576.	ANEB14	The Use of Mobile Technology on the Example of Health and Sports Statistics Application	2016
577.	ANEB15	Campus Sense - A Smart Vehicle ParkingMonitoring and Management System using ANPR Cameras and Android Phones	2016
VIRTUAL REALITY			
578.	ITVRT01	Virtual Body Swap: A New Feasible Tool to be Explored in Health and Education	2017
579.	ITVRT02	Automatic Speed Adjustment for Travel through Immersive Virtual Environments based on Viewpoint Quality	2017
580.	ITVRT03	Cognitive Load Measurement in a Virtual Reality-based Driving System for Autism Intervention	2017
581.	ITVRT04	Virtual Hand-Button Interaction in a Generic Virtual Reality Flight Simulator	2017
582.	ITVRT05	Design of Mobile Robot Teleportation System Based on Virtual Reality	2017
583.	ITVRT06	A Sensor-Based Dual-Arm Tele-Robotic System	2017
584.	ITVRT07	An Adaptive Virtual-Reality User-Interface for Patient Access to the “Personal Electronic Medical Record”	2017
585.	ITVRT08	virtual reality based search and analysis of	2017

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	victims trapped beneath the surface	
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MECHANICAL			
THERMAL ENGINEERING			
S. NO	CODE	PROJECT TITLES	APPLICATION
585	ITMT01	Cycloneseparatorwith blower	Industry
586	ITMT02	Fabrication of miniatureboiler	Industry
587	ITMT03	Solarstill usingPCM materials	Houses
588	ITMT04	Fabrication ofthreein one air-conditioner	Houses
589	ITMT05	Automated outdoormist control system	Environment
590	ITMT06	Fabrication and performance analysis of solarwaterheater	Houses &industry
591	ITMT07	Solar aided portablevacuum desalination system	Houses
592	ITMT08	Solarpoweredwaterlifterusing giant wheel method	Agriculture
593	ITMT09	Multi stageHydroelectricpowerplant	PowerPlant
594	ITMT10	Swingelectricitypowergeneration system	Powergenerati on
595	ITMT11	Fabrication ofshell and tubeheat exchanger	Exchanger
596	ITMT12	Designand fabrication ofmini wind mill	PowerGenerati on

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597	ITMT13	Steam powerplant	Power Generation
598	ITMT14	Fabrication of Reactor for converting Plastic into useful Fuel	Fuel System
599	ITMT15	Seawave Power generation System	Power Generation
AUTOMOBILE ENGINEERING			
600	ITMA01	Fabrication of Treadmill Bicycle	Vehicle
601	ITMA02	Three Axis Modern Pneumatic Trailers	Vehicle
602	ITMA03	Automatic braking and bumpers system for automobiles	Vehicle
603	ITMA04	Neodymium Magnetic Shock Absorber for automotive	Vehicle
604	ITMA05	Automatic Tyre Pressure Inflation System for automotive	Vehicle
605	ITMA06	Fabrication Of Solar Powered Wheel Chair For Disable Person	Human
606	ITMA07	Exhaust gas heat recovery for Power generation and Braking	Vehicle
607	ITMA08	Sensor operated electromagnetic clutch and braking system	Vehicle
608	ITMA09	Design and Fabrication of chainless bicycle	Vehicle
609	ITMA10	Easy folding mobile cycle	Vehicle
610	ITMA11	Fabrication of Solar Powered battery cycle	Vehicle
611	ITMA12	Performance of a Radiator with Water and Nanofluid	Cooling System

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612	ITMA13	Hydrogen Engine	Vehicle
613	ITMA14	Production of Electric Power through Shock Absorber	Power Generation
614	ITMA15	On Board Diagnostic Control For Automobile Engine	Engine Condition
FABRICATION AND MANUFACTURING			
615	ITMF01	Solar Tracking System In Manual Rice Transplanter	Agriculture
616	ITMF02	Semi-automatic Ironing Machine	Industry
617	ITMF03	Four Way Hacksaw	Industry
618	ITMF04	Pepper Separating Machine	Industry
619	ITMF05	Manually operated Road Cleaner	Environment
620	ITMF06	Design & fabrication of Vertical and Horizontal axis wind mill for low end power generation	Industry
621	ITMF07	Glass Cleaning Robot Using Scissor Lift Mechanism	Industry
622	ITMF08	Sand Cleaner Robot Using Vibrating Mechanism	Industry
623	ITMF09	Multi Spindle drill Head	Industry
624	ITMF10	Automatic Vegetable cutting Machine	Hotel
625	ITMF11	Fabrication of Exoskeleton Hydraulics support (Chairless chair)	Human
626	ITMF12	Fabrication of Mechanical Spider	Sewage

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627	ITMF13	Fabrication of both cutting punching and grinding machine by electric power	Industry
628	ITMF14	Fabrication of Painting Machine using rack and Pinion Mechanism	Painting
629	ITMF15	Multi Axis Conveyors	Industry
HYDRAULICS AND PNEUMATICS SYSTEM			
630	ITMH01	Compressed Air Vehicle	Vehicle
631	ITMH02	Automatic Load Carry Robot For Industries Using Pneumatic	Industry
632	ITMH03	Automatic Sensor Operated Pneumatic Braking System	Vehicle
633	ITMH04	Pneumatic mobile crane	Industry
634	ITMH05	Multi axis welding mechanism	Industry
635	ITMH06	Design and fabrication of pneumatic tricycle	Human
636	ITMH07	Zigzag pneumatic lift	Industry
637	ITMH08	Design and fabrication of both cutting punching and grinding	Industry
638	ITMH09	Easy handled handicapped	Disabled
639	ITMH10	Design and fabrication of pneumatic engine	Automobile
640	ITMH11	Pneumatic Injection moulding Machine	Industry
641	ITMH12	Compressed air production and driven Bicycle	Vehicle
642	ITMH13	Pneumatic Inbuilt Jack using Rack and Pinion	Vehicle
643	ITMH14	Fabrication of Pneumatic Engine	Vehicle
644	ITMH15	Pneumatic multi axis Material handling End Effector	Industry
MECHANICAL ENGINEERING			

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645	ITMM01	Pick And Place Robot Using Conveyor Line Follower Mechanism	Industry
646	ITMM02	Fabrication of overspeed indication and automated braking system for automobiles	Vehicle
647	ITMM03	Vehicle ignition using face recognition system	Vehicle
648	ITMM04	Automatic work piece counting with belt	Industry
649	ITMM05	Automatic paint spraying robot using Scissor lift	Industry
650	ITMM06	Automatic Brake Failure And	Vehicle
651	ITMM07	Remote control wheelchair cum bed	Human
652	ITMM08	Automatic board cleaner	Seminar Hall
653	ITMM09	Poor Quality rejection	Industry
654	ITMM10	Automatic water spraying machine	Agricultural
655	ITMM11	Automatic Pipe Crawling Robot for inspection	Oil Industry
656	ITMM12	Drainage Cleaning Robot	Sewage
657	ITMM13	Automatic Farm Genesis Robotics system	Agricultural
658	ITMM14	Robotic Arm for various Material	Industry
659	ITMM15	Automatic garbage separation system	Municipal
AGRICULTURAL			
660	ITAG01	Design and Fabrication of Grass cutter for agricultural	Agriculture
661	ITAG02	Solar Agricultural water pumping system	Agriculture
662	ITAG03	Solar operated sprayer for agricultural purpose	Agriculture
663	ITAG04	Hydro pump for agricultural application	Agriculture
664	ITAG05	Fabrication of pedal power ram type water pumping machine	Irrigation
665	ITAG06	Manual operated seeding machine	Agricultural
666	ITAG07	Sugarcane bud chipper	Agricultural
667	ITAG08	Coconut tree climbing and cutting machine	Agricultural
668	ITAG09	Solar grass cutter with linear blades by using scotch yoke	Horticulture
669	ITAG10	Agricultural Farm Vehicle	Agricultural

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CIVIL		
SNO	PROJECT CODE	PROJECT TITLE
670	ITCIC01	Experimental study on self compacting concrete using GGBS and flyash
671	ITCIC02	Experimental investigation on recycled aggregate concrete
672	ITCIC03	A study on effects of light weight aggregates on compressive and flexural strength of concrete
673	ITCIC04	Strength Characteristics of Self curing concrete
674	ITCIC05	Experimental Study on Utilization of Blast Furnace Slag in Concrete
675	ITCIC06	Study On Strength Behavior Of Concrete Using Foundry Dust In Fine Aggregate
676	ITCIC07	Behavior of concrete beams with coconut shell as coarse aggregates
677	ITCIC08	Experimental studies on the influence of the size of the aggregate in the compressive strength of concrete
678	ITCIC09	Study on Behavior Of Concrete Partially Replacing Quartz Sand As Fine Aggregate
679	ITCIC10	Project on Partial Replacement of Cement with Marble Powder
680	ITCIC11	Concrete Aggregates From Discarded Tyre Rubber
681	ITCIC12	River Bed Uncrushed Aggregates For Concrete
682	ITCIC13	Effect Of Different Curing Methods On The Compressive Strength Of Concrete
683	ITCIC14	Experimental Investigation In Developing Low Cost Concrete From Paper Industry Waste

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684	ITCIC15	Partial replacement of beach sand as fine aggregate for concrete
		CONCRETE
685	ITCIC16	Project on Partial Replacement of Cement with Brick Powder
686	ITCIC17	Compressive behavior of steel fibre reinforced concrete at high temperatures
687	ITCIC18	Effect of partial replacement of sand with municipal solid waste ash on the strength of concrete
688	ITCIC19	Compressive strength development of blended cement concretes containing Portland cement, fly ash and metakaolin
689	ITCIC20	An experimental investigation on the strength properties of bacterial concrete with fly ash.

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Education Partners:



Technologies and Domain used:

IEEE 2017, Java, J2ee, Android, Bigdata, Dot net, Arduino, Raspberry pi, IOT, Renewable, PHP, Embedded, Vlsi, Matlab, VB, Net working, Data Mining, Image Processing, Cloud Computing, Mobile Computing, Multimedia, Network Security, Soft Engg, Grid Computing, Automation, Robotics, Communication, RF, Zigbee, Blue tooth, GSM/GPS/GPRS, Power Electronics & Systems, Electrical, DSP, RTOS, Bio metrics, Civil, Analysis, Fabrication, Mechanical, CFD, FEA, etc.

Features

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- All our efforts are focused on students to meet industry requirements.
- Our environment is encapsulated with doctorates, professionals and other experts.
- Excellent Placements through our **Spiro HR Management Consultants (SMC) Pvt Ltd.**

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